



**JEFFREY M. CARLTON  
HEART & VASCULAR INSTITUTE**

# Your Support Made a Difference

**2018 REPORT TO DONORS**

The Jeffrey M. Carlton Heart & Vascular Institute continues to rank in the top tier of nationally recognized heart institutes. Our dedicated physician leaders are setting standards of excellence in treating complex heart and vascular conditions with compassion, skill and innovation. Thanks to philanthropy, the Carlton Heart & Vascular Institute is the first in our area, our state and even nationally to offer groundbreaking new techniques and technologies to the communities we serve.

This report is a summary of the impact that you made with your support in 2018.



Jeffrey M. Carlton Heart & Vascular Institute team of cardiologists, cardiac surgeons, nurses and clinical staff.

**HOAG  
PROMISE** | OUR CAMPAIGN TO  
LEAD, INNOVATE  
& TRANSFORM



## Hoag Hospital Irvine Opens First on the West Coast State-of-the-Art Catheterization

Thanks to the generosity of our community, Hoag Hospital Irvine opened two newly renovated cardiac catheterization labs/interventional radiology suites in November 2018. The state-of-the-art equipment and technology make it the first of its kind on the West Coast providing a higher quality of imaging with a reduced amount of radiation exposure to clinicians and patients.

This is an important upgrade since Hoag Hospital Irvine is a designated Cardiovascular Receiving Center, which means that it's one of only 13 hospitals in Orange County, including Hoag Hospital Newport Beach, which can directly receive patients via ambulance who are suffering a heart attack and need immediate attention.

The new suites allow physicians to diagnose and treat heart conditions, such as cardiac arrhythmias, in Irvine. Previously, patients had to travel to Hoag Hospital Newport Beach for this care. The cath labs also serve patients managing cancer, diabetes and orthopedic conditions. Now that the suites are open, they will double the number of patients previously served in the Irvine community.

## Anthony Caffarelli, M.D., Named Newkirk Family Endowed Chair in Aortic Care

REPORT TO DONORS

In September 2018, Hoag Hospital Foundation held an Endowed Chair Investiture ceremony to appoint Anthony Caffarelli, M.D., director of Hoag Aortic Center and director of Cardiac Surgery at Hoag, as the Newkirk Family Endowed Chair in Aortic Care. The event honored decades-long Hoag friends and supporters Martha and Jim Newkirk.

Martha and Jim established the Endowed Chair to recognize Dr. Caffarelli's leading-edge work with aortic aneurysms. The Newkirk's gift will enable Dr. Caffarelli to contribute more to the field of research, train staff and educate and treat patients.

"Dr. Caffarelli is a surgeon of great passion and vision," said Robert T. Braithwaite, president and CEO of Hoag. "His commitment to patients goes beyond description. He's our 'Plus One' guy who takes the standards of excellence one step further. This is a tribute to the excellence Tony has brought to Hoag and to our community."



Jim and Martha Newkirk with Dr. Anthony Caffarelli

In 2018, the Hoag Aortic Center joined the Montalcino Aortic Consortium. Hoag is the only community hospital in the United States participating in this international group of prominent clinical, basic and translational investigators from academic medical centers around the world committed to diagnosing and managing aortic disorders and discovering their genetic causes. Hoag is also one out of 24 U.S. hospitals that perform more than 50 aortic procedures each year.

“The more patients we enroll, the more data we can collect to help their children and grandchildren manage their risk for aortic disease,” said Rita Weise, N.P., Acute Care Nurse Practitioner in the Hoag Aortic Clinic.

## Hoag Aortic Center Is the Only Non-Academic Hospital Invited to Join Preeminent International Consortium

The Aortic Clinic team closely monitors and teaches patients with aortic disease, and their family members, and provides education on how to proactively manage their health. Through personalized medicine, genetic testing is implemented for patients and their family members who are at high-risk.

Thanks to philanthropy, the team also acquired Aortic Solutions, a patient management database system that will launch this year.



## Hoag Is First in Orange County with the Latest Technology

### Hoag Offers Extracorporeal Membrane Oxygenation (ECMO) Program

Philanthropy supported lifesaving nurse training and the purchase of new Extracorporeal Membrane Oxygenation (ECMO) machines to accelerate the development of Hoag's Advanced Heart & Respiratory Failure Program.

The ECMO machine pumps and oxygenates blood, allowing the heart and lungs to rest. It can be a lifesaving intervention for patients in need of pulmonary support, with severe ARDS (Acute Respiratory Distress Syndrome) or those in complete heart failure.

Hoag is the first in Orange County to offer this lifesaving Program to adults for heart and lung support.

## Hoag Is One of Select Number of Sites to Offer TAVR

Hoag's Jeffrey M. Carlton Heart & Vascular Institute is one of a select number of sites in the nation to treat patients with a non-surgical approach to aortic valve replacement - transcatheter aortic valve replacement (TAVR).

This revolutionary treatment option provides an important therapy for patients with severe aortic valve stenosis who are at low (through a clinical trial), intermediate or high risk for conventional valve replacement surgery. Thanks to Bob and Marjie Bennett and other generous donors, Hoag became the first in Orange County to offer this treatment option and today has treated the most TAVR patients in our area. The highly skilled, handpicked TAVR team performed 125 TAVR procedures in 2018.

"We are grateful to our donor community that allows us to continue to grow and to participate in an innovative opportunity that will change aortic valve care for the country." – Angela Devlin, B.S.N., R.N., Director of Cardiology Programs

### Donor-Funded Navigation Supports TAVR Patients

Philanthropy has funded a dedicated TAVR Nurse Coordinator, Peggy Morley, R.N., D.N.P., A.N.P.-B.C., C.C.N.S., who has been a Hoag cardiovascular nurse for 30 years. Patients referred to Hoag for TAVR first meet with her for their diagnostic testing, patient history and a physical. Peggy presents each patient case at the weekly TAVR team meetings and works with patients to set up appointments with surgeons as well as follow-up appointments post procedure.

"We wouldn't have this program without donor support," Peggy says. "I've developed close relationships with my patients and it is a personal and professional joy to work with the TAVR team."



TAVR Nurse Coordinator, Peggy Morley,  
R.N., D.N.P., A.N.P.-B.C., C.C.N.S.,

## Clinical Research Studies at Jeffrey M. Carlton Heart & Vascular Institute

The Jeffrey M. Carlton Heart & Vascular Institute is one of a small number of community hospitals actively performing research and clinical trials. Our community depends on new knowledge, technology and best practices in care. Thanks to philanthropy, we have more than 30 trials currently underway. Major areas of focus include cardiac imaging studies, techniques for testing and programming implantable cardiac defibrillators/ pacemakers and cardiac valve surgery.

Some available cardiovascular clinical trials are:

- EARLY Transcatheter Aortic Valve Replacement (TAVR) for patients with aortic stenosis.
- Genetic risks for bicuspid aortic valve disease or unicuspid aortic valve.
- Montalcino Aortic Consortium: Precision Medicine for Heritable Thoracic Aortic Disease (appropriate for patients with thoracic aortic disease).
- Registrational Study with Omecamtiv Mecarbil/AMG 423 to Treat Chronic Heart Failure with Reduced Ejection Fraction (GALACTIC-HF): for patients with heart failure.
- Same Day Discharge Post Percutaneous Coronary Intervention: for patients that have undergone a post percutaneous coronary intervention.
- STOP AF First: Cryoballoon Catheter Ablation in an Antiarrhythmic Drug Naive Paroxysmal Atrial Fibrillation: for patients with atrial fibrillation.



## Hoag Is First & Only in Orange County to Offer a Peripheral Arterial Disease (PAD) Supervised Exercise Training Program

Peripheral artery disease is a narrowing of the peripheral arteries serving the legs, stomach, arms and head. Patients experience cramping, pain or tiredness in the leg or hip muscles and have a higher risk of coronary artery disease, heart attack and stroke.

Hoag continues to be the first and only hospital in Orange County offering the PAD Supervised Exercise Training (SET) Program. Since the launch, Debbie Bordwell, N.P., R.N., nurse practitioner of PAD SET, reports more than 50 patients completed the three-month program through the Hoag Cardiac Rehab Centers in Newport Beach and Irvine.

Debbie hears her patients say things like, “I can walk my dog around the park twice, or I can now go to Disneyland with my family.” It might not sound like completing the Boston Marathon, but for patients who can only walk four to five minutes before feeling excruciating pain, the gains they receive from the Program are life-changing.

“Until you lose the ability to walk pain-free, you take your independence and confidence to go about your daily life for granted,” Debbie said. “All of a sudden, our patients are petrified of activities like crossing an intersection for fear they’ll have to stop from the pain.”

But, under the guidance of trained staff, patients increase their pain-free walking distance, regain their independence and prevent the need for invasive procedures. The Program also gives participants access to a dietitian as well as social workers who can help with any needs they have at home.

## Best-in-Class Cardiac Arrhythmia Care

Hoag offers the full spectrum of treatment options for arrhythmia management backed by the most advanced local, and in some cases national, technology.

“With the assistance of donors, Hoag has invested in every possible tool to facilitate state-of-the-art care for patients,” said Teferi Mitiku, M.D., program advisor for Hoag Irvine Arrhythmia Management. “This is important because not all arrhythmias are created equal. Having all the tools needed allows us to make the best decisions for our patients. It speaks volumes about the value Hoag places on quality care.”

Hoag’s comprehensive arrhythmia care includes medication therapy, minimally invasive therapies, electrical devices and surgery.

### Advances in Arrhythmia Management Conference

Made possible by a generous donation from Pei-yuan Chia and Katherine Shen, the annual Arrhythmia Management Conference presented the latest knowledge in electrophysiology and arrhythmia management. The conference featured the current and novel modalities of treatment of atrial fibrillation including ablation and noninvasive modalities, novel

anticoagulants, alternatives to anticoagulation in arrhythmia management, clinical management scenarios, pacemaker and AICD lead management and left atrial appendage closure.

“Hoag has developed a very high-level arrhythmia conference on par with conferences held at academic institutions,” said Neala J. Hunter, M.D., F.A.C.C., program director for the Annual Advances in Arrhythmia Management Conference. “We are very grateful to Pei and Kitty for allowing us to bring world-class presenters to our conference who allow us to improve patient care and safety as well as incite new excitement about the field.”

One of the keynote speakers, Warren M. Jackman, M.D., F.A.C.C., F.H.R.S., the George Lynn Cross Research Professor at the University of Oklahoma, returns to Hoag every quarter to present a lecture to Hoag clinicians.

## Specialized Training for Specialized Care

The Jeffrey M. Carlton Heart & Vascular Institute is a place for care but also a place for learning and sharing new information with clinicians across Orange County and beyond. Philanthropy supported several important conferences hosted by the Carlton Heart & Vascular Institute, not only bringing together thought leaders and world-class researchers to the community, but featuring the expertise of our talented team.

### 9th Annual Cardiology Update Symposium: The Heart of New Developments

Dipti Itchhaporia, M.D., F.A.C.C., F.E.S.C., Robert & Georgia Roth Endowed Chair for Excellence in Cardiac Care, is the program director for this annual meeting of the California Chapter of the American College of Cardiology. The program is designed to provide an overview of clinically relevant updates on the latest advances in cardiovascular disease.

### Joel H. Manchester, M.D., Distinguished Lecture Series

Thanks to support from the Joel H. Manchester, M.D., Endowment Fund, Dr. Manchester's passion for cardiovascular care and education continues today. The 2018 lecture titled "Lessons Learned from Research into Cardiovascular Disease Among Amazonian Natives" was delivered by Hillard Kaplan, Ph.D., professor at Chapman University.

### 34th Advanced Echo Conference

Natesa Pandian, M.D., F.A.C.C., medical director of the Nancy & Bill Thompson Heart Valve Center and Director of Noninvasive Cardiac Imaging, and Pravin Shah, M.D., M.A.C.C., led the annual conference that gathered visiting faculty representing the University of Massachusetts, Georgetown University, Mayo Clinic, Tufts Medical Center and Cedars-Sinai Medical Center.

### Hoag Cardiovascular Nursing Conference

The Carlton Heart & Vascular Institute Program Committee includes Jerry Connell, M.B.A., R.N.-B.C.; Angela D. Devlin, B.S.N., R.N.; Meredith Padilla, Ph.D., M.S.N., R.N., C.C.R.N., C.C.R.N.-C.M.C./C.S.C.; Rachel Russell, B.S.N., R.N.; and Patrick Shane, B.S.N., R.N., C.C.R.N. This conference highlights current and future trends in cardiovascular patient care and includes a wide range of topics covering best practices in nursing.

### Vascular Imaging Symposium

Under the direction of Ehab Mady, D.O., F.S.V.M., R.P.V.I., medical director of Hoag Vascular Services Program, and Dianne Masri, B.S., M.A., R.D.M.S., R.V.T., supervisor and technical director of Hoag Vascular Services Program, this educational program provided physicians and technologists with up-to-date clinical knowledge on the diagnosis and treatment of vascular diseases. Faculty from Hoag's multidisciplinary team explored current practices and future trends.

## You've Made Us What We Are Today!

- The Society of Thoracic Surgeons ranked Hoag's cardiovascular surgery program in the highest category for quality and successful outcomes; achieved by only 10 percent of hospitals nationwide.
- Named by *IBM Watson Health* (formerly Truven Health Analytics) as one of the nation's "50 Top Cardiovascular Hospitals" for the third consecutive year.
- *U.S. News & World Report* ranked Hoag high performing in Abdominal Aortic Aneurysm Repair, Aortic Valve Surgery, Heart Bypass Surgery and Heart Failure.
- Women's Choice Award® 2019 has named Hoag as one of America's Best Hospitals for Heart Care (2014 – 2019).
- 2018 Recipient of the American Heart Association's Get With The Guidelines® - Heart Failure Gold Plus Quality Achievement Award.
- Designated a Blue Distinction® Center+ in the Blue Distinction Centers for Cardiac Care program by Anthem Blue Cross.

## Thank you

We are grateful for your generous support. Because of you, the Jeffrey M. Carlton Heart & Vascular Institute continues to lead the way in innovative and patient-centered care in Orange County.

For more information, please contact Hoag Hospital Foundation at (949) 764-7217. Please visit our website at [www.HoagPromise.org](http://www.HoagPromise.org).